Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (original) An apparatus for testing a computer microarchitecture, comprising:
means for providing reprogrammed microcode, comprising:
        means for reprogramming microcode;
        means for storing reprogrammed microcode, comprising:
                microcode related to one or more macroinstructions, and
                reprogrammed test microcode for testing the computer
microarchitecture, wherein the reprogrammed test microcode comprises a sequence of
microinstructions executed to test the computer microarchitecture; and
        means for sequencing the sequence of microinstructions and producing an
address for the reprogrammed test microcode.

2.   (original) The apparatus of claim 1, further comprising:
a dispatcher that receives the sequence of microinstructions and provides outputs; and
execution units that receive the outputs and execute microinstructions.

3.   (original) The apparatus of claim 1, wherein the computer microarchitecture supports
multiple instruction sets.

4.   (original) The apparatus of claim 1, wherein the apparatus is implemented as a
software model.

5.   (original) The apparatus of claim 4, wherein the software model is implemented on a
computer-readable medium.

6.   (original) The apparatus of claim 1, wherein the means for sequencing comprises a
macroinstruction to microinstruction mapper that maps macroinstructions into sequences of
microinstructions.

7.   (original) A method for testing a computer microarchitecture, comprising:
reprogramming microcode for storage in a microcode storage;
        designating a macroinstruction for execution, wherein the execution initiates a test
sequence comprising the reprogrammed microcode;
        receiving inputs corresponding to one or more of entry points and computer state
information; and
        producing an address for the reprogrammed microcode.

8.   (original) The method of claim 7, further comprising:
providing the reprogrammed microcode to a dispatcher; and
        dispatching the reprogrammed microcode to specified execution units for execution of
the microinstruction.

9.   (original) The method of claim 7, wherein the computer microarchitecture supports multiple instruction sets.

10.   (original) A method for conducting a test of a computer microarchitecture, comprising:

   mapping a macroinstruction to a particular sequence of microinstructions;

   replacing the particular sequence of microinstructions with an arbitrary set of microinstructions, wherein the arbitrary set of microinstructions comprises the test;

   receiving inputs corresponding to one or more of entry points and computer state information; and

   producing an address for the arbitrary set of microinstructions.

11.   (original) The method of claim 10, wherein the computer microarchitecture supports multiple instruction sets.

12.   (original) The method of claim 10, further comprising issuing the macroinstruction to execute the test microinstructions.

13.   (original) A computer readable medium comprising code for conducting a test of a computer microarchitecture, the code implementing the steps of:

   mapping a macroinstruction to a particular sequence of microinstructions;

   replacing the particular sequence of microinstructions with an arbitrary set of microinstructions, wherein the arbitrary set of microinstructions comprises the test;

   receiving inputs corresponding to one or more of entry points and computer state information; and

   producing an address for the arbitrary set of microinstructions.

14.   (currently amended) The computer readable medium of claim 13, wherein the steps further comprise issuing the ~~microinstruction~~macroinstructions to execute the test microinstructions.